

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number
WO 2005/074088 A3

(51) International Patent Classification⁷: **H02H 5/08**,
G01N 33/00

(21) International Application Number:
PCT/FI2005/000054

(22) International Filing Date: 28 January 2005 (28.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20040129 29 January 2004 (29.01.2004) FI

(71) Applicant (for all designated States except US): **ABB Oy**
[FI/FI]; Strömbergintie 1, FI-00380 Helsinki (FI).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SILVENNOINEN, Mika** [FI/FI]; Vanha Turuntie 75 C 7, FI-02740 Espoo (FI).

(74) Agent: **BERGGREN OY AB**; P.O. Box 16 (Jaakonkatu 3 A), FI-00101 Helsinki (FI).

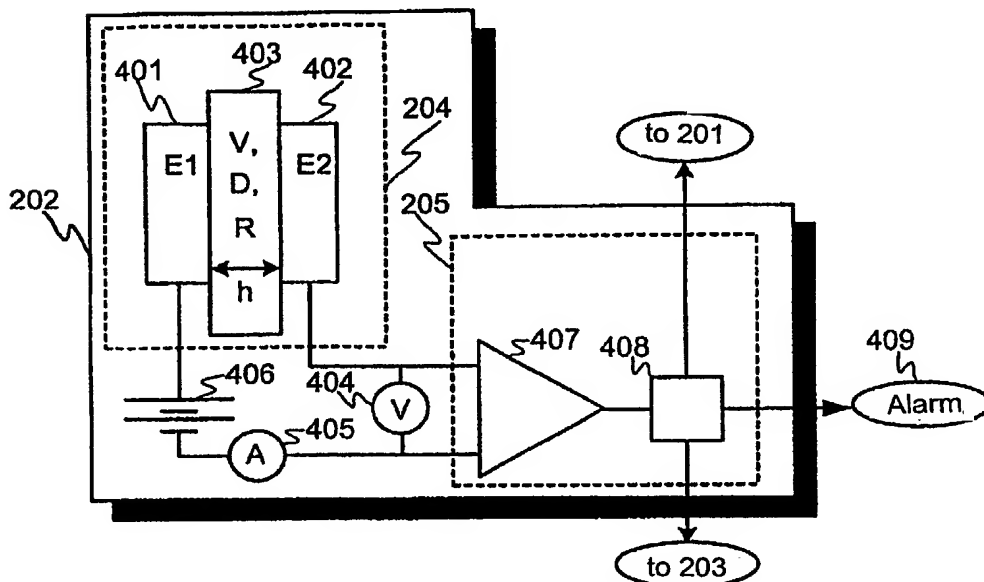
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: ENVIRONMENTAL FUSE



(57) Abstract: The invention relates to an environmental fuse, an actuator and to an associated method for protecting the actuator from failure in a specific operating environment. The environmental fuse then comprises a sensor member for detecting any change in the environment deviating from the tolerance allowed by a specific standard, and a functional member comprising functional means for limiting or interrupting the input to said actuator and/or for giving an alarm. The actuator may also comprise an environmental fuse.

WO 2005/074088 A3



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:
29 September 2005